



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/822,882	04/13/2004	Richard Simons	H0006930-0766(1161.116310	4002
128	7590	12/15/2005		EXAMINER
HONEYWELL INTERNATIONAL INC. 101 COLUMBIA ROAD P O BOX 2245 MORRISTOWN, NJ 07962-2245			BHAT, ADITYA S	
			ART UNIT	PAPER NUMBER
				2863

DATE MAILED: 12/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/822,882	SIMONS, RICHARD	
	Examiner Aditya S. Bhat	Art Unit 2863	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 16 November 2005.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-34 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-34 is/are rejected.  
 7) Claim(s) 22 is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 13 April 2004 is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>11/16/9/28/05, 7/22</u> .	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

**DETAILED ACTION**

**EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Brian Tufte on December 8, 2005.

The application has been amended as follows:

In the first occurrence of claim 23, line 1, "23" has been deleted and --22-- has been inserted.

The amendment to claim 23 was made to define over the applied prior art. This system is deemed to be non-obvious over the systems of the prior art

***Claim Objections***

Claim 22 is objected to because of the following informalities: Claim 22 objected to under 37 CFR 1.75 as being a substantial duplicate of claim 23. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-34 are rejected under 35 U.S.C. 102(b) as being anticipated by Hill et al. (EP 1 196 003 A2).

With regards to claim 1, Hill et al. (EP 1 196 003 A2). teaches a method for testing an HVAC system for a building structure from a remote location outside of the building structure,(see 12;figure 1) the HVAC system having a primarily active component and a primarily dormant component, the method comprising the steps of:

transmitting a test request to the HVAC system from the remote location; (Col. 3-4, Paragraph 0021, lines 58 &1-3)

performing a test on the primarily dormant component of the HVAC system in response to the test request (col. 3, Paragraph 0016, lines 6-7), and producing a test result; (Col. 4,Paragraph 0021, lines 1-2) and

transmitting the test result to a location outside of the building structure. (Col. 4, Paragraph 0021, line 2)

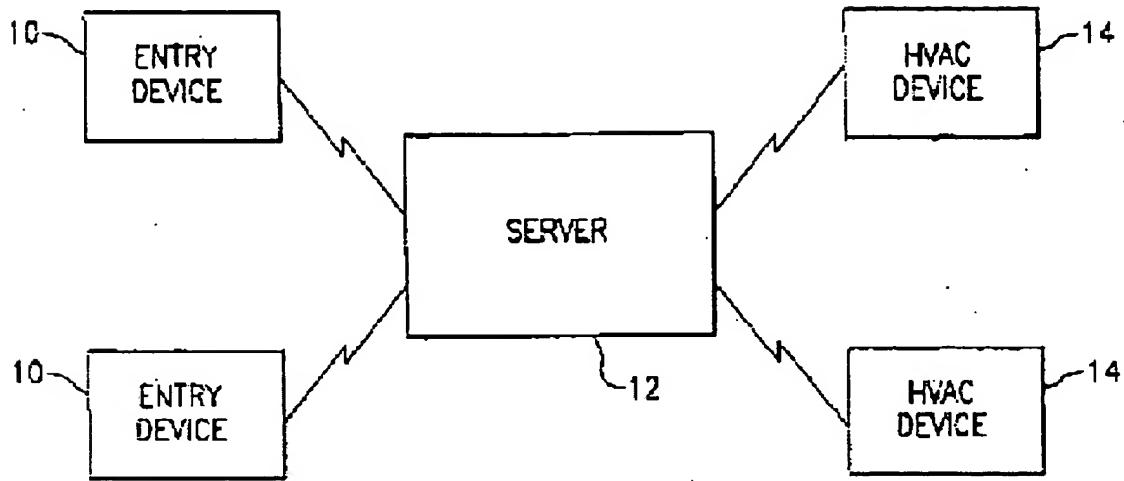


FIG.1

With regards to claims 2 and 4, Hill et al. (EP 1 196 003 A2) teaches that the primarily active component is a heating component or a cooling component. (14; figure 1)

With regards to claim 3 and 5, Hill et al. (EP 1 196 003 A2) teaches that the primarily dormant component is a cooling component or a heating component. (14; figure 1)

With regards to claims 2-5, the monitoring system is continuously monitoring/testing the system it would be with reasonable interpretation to assume that the heating/cooling components are being monitored in both active and dormant states.

With regards to claim 6, Hill et al. (EP 1 196 003 A2) teaches the test request is transmitted to the HVAC system from a remote computer.

With regards to claims 7-10, Hill et al. (EP 1 196 003 A2) the test request is transmitted to the HVAC system from the remote computer via a telephone line connection, from the remote computer via a wireless connection, from the remote computer via a computer network, from the remote computer via the internet. (Col. 3,Paragraph 0016, line1-5)

With regards to claims 11-12, Hill et al. (EP 1 196 003 A2) teaches a gateway(12; figure 1) for receiving the test request from the remote computer, and for communicating with the HVAC system wherein the gateway stores one or more tests. (Col. 5,Paragraph 0028, line 20-25) (figure 7)

UNIT DATABASE

UNIT NAME	UNIT PHONE #	POWER	MODE	ROOM TEMP	SETPOINT	FAN SPEED	LOUVER	TIMER	DIAGNOSTIC	ALARM METHOD 1	ALARM DATA 1
OFFICE	(315)555-3456	ON	HEAT	22	22	LOW	1	OFF	NONE	E-MAIL	XYZ@CARRIER.UTC.COM
MILAN	0131234123412	OFF	OFF	23	22	OFF	HOME	OFF	NONE	PHONE	(315)555-1234
FRANCE	3371234512345	ON	COOL	24	22	MEDIUM	6	OFF	NONE	E-MAIL	XYZ@CARRIER.UTC.COM
LOBBY	(315)555-4567	ON	FAIL	25	22	OFF	HOME	OFF	ROOM AIR	SMS	(315)555-2345

FIG.7

With regards to claim 13, Hill et al. (EP 1 196 003 A2) teaches the gateway submits at least one of the one or more tests to the HVAC system in response to the test request. (Col. 1,Paragraph 0003, line 23-25) (see figure 1)

With regards to claim 14, Hill et al. (EP 1 196 003 A2) teaches a subset of the one or more tests and submits the subset of the one or more tests to the HVAC system

in response to the test request. (see figure 6) (unit1,2,...N)

USER DATABASE

USER NAME	PASSWORD	UNIT 1	UNIT 2	...	UNIT N
CARRIER 1	123456	OFFICE	MILAN	...	FRANCE
CARRIER 2	654321	LOBBY	MILAN	...	

FIG.6

With regards to claim 15, Hill et al. (EP 1 196 003 A2) teaches the HVAC system includes two or more zones, and the test that is performed activates the primarily dormant component in conjunction with each of the two or more zones. (Col. 2, Paragraph 0007, lines 34-35)

With regards to claim 16, Hill et al. (EP 1 196 003 A2) teaches the transmitting step transmits a test request to two or more HVAC systems from the remote location. (see figure 1)

With regards to claim 17, Hill et al. (EP 1 196 003 A2) teaches the performing step performs a test on the primarily dormant component of the two or more HVAC systems in response to the test request, and produces a test result for each HVAC system. (see figure 7)

With regards to claim 18, Hill et al. (EP 1 196 003 A2) teaches the transmitting step transmits the test result for each HVAC system to a location outside of the building structure. (see figure 1)

With regards to claim 19, Hill et al. (EP 1 196 003 A2) teaches the remote location that the test request is transmitted from is the same as the remote location that the test result is transmitted. (Col. 4,Paragraph 0025)

With regards to claim 20, Hill et al. (EP 1 196 003 A2) teaches the remote location that the test request is transmitted from is different than the remote location that the test result is transmitted. (Col. 4,Paragraph 0025)

With regards to claim 21, Hill et al. (EP 1 196 003 A2) teaches a method for testing a plurality of HVAC systems each in a different building structure or in a different region of a common building structure from a remote location, (see 12;figure 1) the method comprising the steps of:

transmitting a test request to each of the plurality of HVAC systems from the remote location; (Col. 3-4, Paragraph 0021, lines 58 &1-3)

performing one or more tests on each of the HVAC systems in response to the test request (col. 3, Paragraph 0016, lines 6-7), and producing a test result for each of the HVAC systems; (Col. 4,Paragraph 0021, lines 1-2) and

transmitting the test result for each of the HVAC systems to a remote location. (Col. 4,Paragraph 0021, line 2)

With regards to claim 22-24, Hill et al. (EP 1 196 003 A2) teaches at least some of the plurality of HVAC systems include a primarily active component and a primarily dormant component, and wherein at least one of the one or more tests that is performed activates and tests the primarily active component or dormant component of the

corresponding HVAC system in response to the test request. (Col. 2,Paragraph 0007, lines 34-35)

With regards to claim 25, Hill et al. (EP 1 196 003 A2) teaches a method for determining which of a plurality of HVAC systems will require maintenance, the method comprising the steps of:

transmitting a test request to each of the plurality of HVAC systems from the remote location; (Col. 3-4, Paragraph 0021, lines 58 &1-3)

performing one or more tests on each of the HVAC systems in response to the test request col. 3, Paragraph 0016, lines 6-7), and producing a test result for each of the HVAC systems; (Col. 4,Paragraph 0021, lines 1-2)

transmitting the test result for each of the selected HVAC systems to a remote location; (Col. 4,Paragraph 0021, line 2) and

identifying which of the HVAC systems will likely need service by analyzing the test results. (Col. 5,Paragraph 0032, line 46-50)

With regards to claim 26, Hill et al. (EP 1 196 003 A2) teaches the step of providing different test requests to at least two of the plurality of HVAC systems, wherein each test request identifies a different test to perform. (see figure 1)

With regards to claim 27, Hill et al. (EP 1 196 003 A2) teaches the step of charging an owner of an HVAC system an amount that depends on the particular test that is performed on the HVAC system. (Col. 3,Paragraph 0009, lines 8-10) It is within reasonable interpretation to infer that service technician would charge for his/her services.

With regards to claim 28, Hill et al. (EP 1 196 003 A2) teaches the step of scheduling service on at least some of the HVAC systems that have been identified as likely needing service. (Col. 2,Paragraph 0007, lines 30-35)

With regards to claims 29 and 30, Hill et al. (EP 1 196 003 A2) teaches a method for testing an HVAC system for an inside space prior to a heating/cooling season, the HVAC system having a heating/cooling component, the method comprising the steps of:

activating the heating component even though the HVAC system would not normally call for heat/cool; (Col. 1,Paragraph 0004, line 44-48) and

determining if the heating component is in compliance with a number of predetermined conditions. (Col. 5,Paragraph 0032, line 36-39)

With regards to claim 31, Hill et al. (EP 1 196 003 A2) teaches a method of remote testing of HVAC systems comprising the steps of:

transmitting one or more maintenance signals from a remote unit to a specified group of customer HVAC systems, the specified group being a number less than a total number of customer HVAC systems in a customer database; (Col. 3,Paragraph 0016, lines 9-11)

receiving the one or more maintenance signals at each of the HVAC systems, the one or more maintenance signals activating an HVAC component; (Col. 2,Paragraph 0005, lines 9-11)

performing a self-test on the activated HVAC component based on the received one or more maintenance signal; (Col. 2,Paragraph 0005, lines 7-9)

generating self-test result signals from the activated HVAC component based on the self-test preformed on the activated HVAC component; (Col. 2,Paragraph 0007, lines 30-34)

transmitting the self-test result signals from the HVAC system to the remote unit; and receiving the self-test result signals from the HVAC systems at the remote unit. (see figure 1)

With regards to claim 32, Hill et al. (EP 1 196 003 A2) teaches determining the specified group of customer HVAC systems based on the specified group of customer HVAC systems being within a specified geographic area prior to the step of transmitting the one or more maintenance signals. (figure 6-7)

With regards to claim 33, Hill et al. (EP 1 196 003 A2) teaches determining which customer HVAC systems from the specified group of customer HVAC systems likely require maintenance based on the self-test signals received by the remote unit. (see figure 7)

With regards to claim 34, Hill et al. (EP 1 196 003 A2) teaches performing maintenance on the customer HVAC systems that are determined to likely require maintenance based on the self-test signals received by the remote unit. (Col. 2,Paragraph 0007, lines 34-35)

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Morelli (EP 1 196 002 A2) teaches a method for wireless remote

Art Unit: 2863

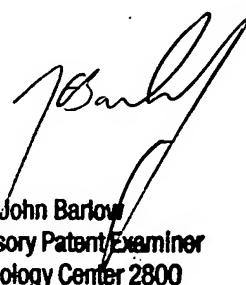
controlling of HVRAC appliances, and Hoog et al. (USPN 6,385,510) teach HVAC remote monitoring,

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aditya S. Bhat whose telephone number is 571-272-2270. The examiner can normally be reached on M-F 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on 571-272-2269. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Aditya Bhat  
December 8, 2005



John Barlow  
Supervisory Patent Examiner  
Technology Center 2800